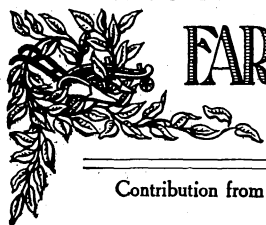


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# U.S. DEPARTMENT OF AGRICULTURE



## FARMERS' BULLETIN

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### BREEDS OF SHEEP FOR THE FARM.

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#### INTRODUCTION.

Recent market values for meat animals have caused a renewal of interest in the raising of live stock on farms. The study of raising and disposing of crops to the best advantage also suggests the more general and more careful production of live stock. In this movement the possibilities of securing profits from farm sheep are becoming better and more widely understood.

Variations in wool values explain in large part the increases and decreases in numbers of farm sheep during the past 50 years. At present many former raisers of commercial sheep who bred altogether for wool are giving more attention to mutton, and most of the new flocks being established are of some of the mutton breeds. A system of sheep farming that is to be continuously successful can not ignore either wool or mutton. In many cases the two products will be worthy of equal consideration; in others, either one may be emphasized according to the peculiarities of conditions, management, and marketing.

A decision to raise sheep chiefly for mutton purposes leaves much still to be considered in making a choice of type and breed. The choice of a breed is not the most important question. Any breed is far superior to no breed. Once established, there must be advance in the character and usually in the size of the flock. Such advance can not be made unless the same breed and type is adhered to in securing rams. The female of mixed breeding, no matter how good individually, is an uncertain quantity when used as a breeder. There are enough highly improved breeds to allow a choice of one that will have special fitness for almost any combination of real needs. In this bulletin it is aimed to discuss the breeds in a way that will enable

NOTE.—Discusses the breeds in a way to enable those not familiar with them to know which are likely to meet their requirements.

those who are not familiar with them to know which ones are likely to meet the requirements.

Some of the breeds differ very strikingly in appearance. Differences in size, color, and covering of face and legs, while quickly noticed, are not the main points which determine whether a breed is likely to prove satisfactory upon rough pasture land, for winter lambing, or any of the points that must be taken into account when starting into sheep raising. The breeds differ very widely in their special points of usefulness for various sections and systems of management. The differences are mainly a result of breeding for special qualities needed by the farmers in the localities in which and for which the breed was formed. The minor points, such as color and shape of head, must be regarded as showing how far the animals are true to the type of what the breeders tried to produce, not only in appearance but in breeding and feeding qualities.

In starting into sheep raising the most important thing is to decide what plan can best be followed. The available feed and care and the selling outlets will determine this. If pasturage is sparse, feed expensive, and marketing arrangements poor, wool will need to be the first consideration. If there is a good market for winter lambs and the feed and care that can be given are such as are needed, then the ability of the ewes to get in lamb in the spring and the mutton qualities are the important things to look for in the breeding stock. If it is desired to have lambs come early and to feed them to be sold before the time stomach worms become troublesome, the choice would not fall upon the same breed that would fit in if there was a better chance to keep the lambs on clean pastures and they were expected to take care of themselves more largely through their first summer.

It is not to be expected that all farmers in a county will select the same breed of sheep. Some may wish to follow plans that differ from the ones favored by other farmers. However, there are many advantages that may be realized if a number of farmers in a community adopt a common plan of sheep raising and use rams of the same type, at least, if not of the same breed. If their lambs are similar and ready to ship at the same time, a number of owners can join together to fill a car, or if the number of lambs is large and the quality uniform they will sell themselves, as the buyers will come after them. Another advantage in community breeding is that new rams can be purchased jointly. Owners of two small flocks can go together and buy a better ram than either of them alone would care to pay for. When the daughters of such a ram are ready to breed he can go to another flock in the neighborhood in exchange for one that has been siring good lambs but is too closely related to ewes in his flock to permit of further use.

### CLASSES OF SHEEP.

There are 30 breeds of improved sheep that have been brought to fixed types as adapted to the needs of their native homes. Of these, 12 are well established in the United States and a number of others are gaining in popularity. The better-known breeds can be grouped into three classes, each class having its own general qualities.

The Middle Wool class includes Southdowns, Shropshires, Hampshires, Oxfords, Dorsets, Cheviots, Suffolks, and Tunis, the last two not being numerous.

The Long Wool class includes the Cotswold, Leicester, and Lincoln breeds, and the Romney Marsh, which is not as well known in America as the others.

The fine-wool class includes the American Merino and the Rambouillet. The various strains of Merinos formerly known by numerous names are now grouped into three types, A, B, and C.

#### MIDDLE WOOLED SHEEP.

The following breeds are included in this class: Southdown, Shropshire, Hampshire, Oxford, Suffolk, Dorset, Tunis, and Cheviot. The first five are collectively referred to as "down" breeds, because of the nature of the country in which they were developed. This country is one of ranges of hills or "downs," as they are called in southern England. The "down" breeds have all been bred primarily for mutton, with special emphasis upon some useful character considered necessary for the style of farming and the markets of the various counties or shires from which most of the breeds take their names.

The face and leg color of all the "down" breeds is of some shade of brown or black, and the fleece occupies a middle position between the length and coarseness of the long wools and the extreme fineness and density of the fine wools. While there are breed variations in fineness, length, and density, the fleece is always close and dry enough to furnish excellent protection.

#### THE SOUTHDOWN.

The Southdown is the oldest of the middle wool breeds and on that account flocks of the breed are strikingly uniform in their qualities and appearance. Their body conformation is the ideal one for mutton and no breed surpasses them in the estimation of the market. From the raiser's standpoint they are not so large as is desirable. Because of their conformation the weights are large in proportion to the apparent size and they will become fat enough for market while growing. Being of medium size they are more active than larger sheep and better adapted to rolling or hilly pastures. The ewes are

good mothers and milkers. With good management the number of lambs raised will average 120 per cent of the ewes bred.

The Southdown is readily recognized by its very blocky, low set appearance. The breadth of the back, thickness of loin, with the plumpness of the thighs and twist, are breed points of greatest value. The head is short and broad, and the eyes prominent. The fleece is very close, quite fine, but usually too short to weigh heavily. The face is sometimes partly covered with wool and varies in its color from brown to mouse color or very light gray. The legs show the same color as the face.

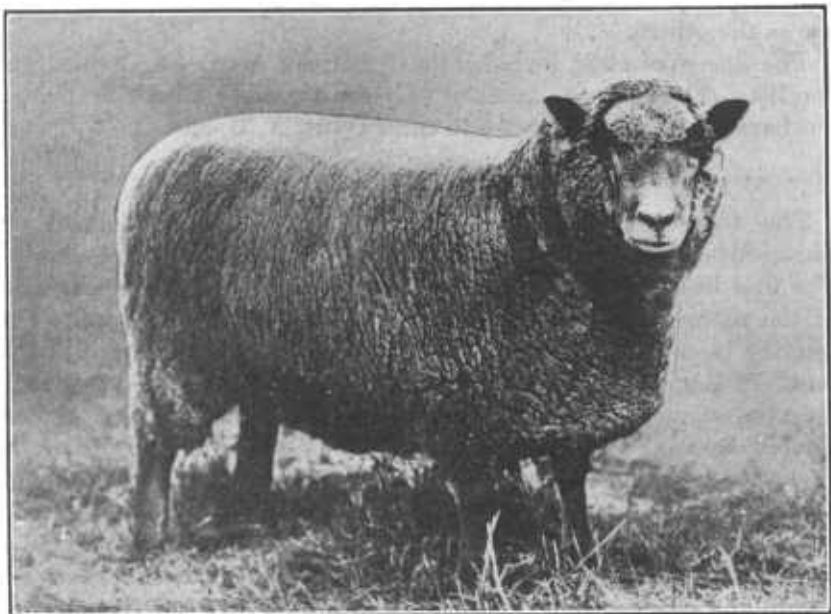


FIG. 1.—A Southdown ewe.

The blocky thick build is characteristic of the breed, as well as the full, plump breast and the short head.

The breeders' association for this breed is American Southdown Breeders' Association, Frank S. Springer, secretary, 510 East Monroe Street, Springfield, Ill.

#### THE SHROPSHIRE.

The Shropshire is the most widely known and bred of the "down" breeds in America. In body it is intermediate between Southdown and larger breeds. The lambs reach common market weight later than the larger breeds and slower gains may be most economical in some sections. Where sheep raising can not be made a specialty, it is often desirable to keep the lambs to be finished in winter quarters. Under such management the lambs of breeds of intermediate size

are not likely to be above the best selling weight when sold. This plan, however, involves the need of adopting methods to avoid trouble from stomach worms in summer and fall.

In weight, length, and fineness of fleece the Shropshire ranks very high and the proceeds of the wool are a very important part of the income from the flock. In breeding for a valuable fleece along with mutton qualities the Shropshire breeders prefer sheep that are well wooled up over the poll, down below the eyes, and on the ears. This along with the shape of the head, and color of face and legs, serves as a distinguishing feature. The head is ordinarily wide between

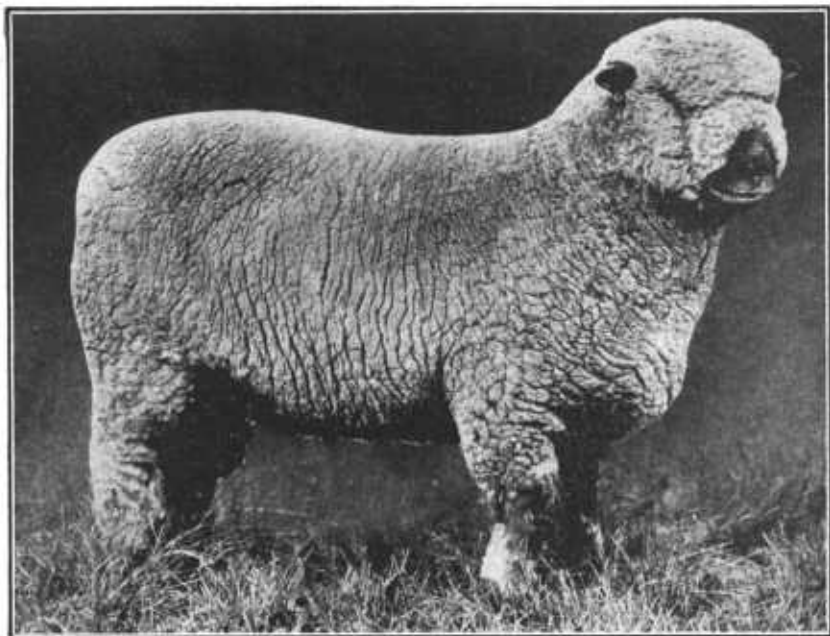


FIG. 2.—A Shropshire ram.

This illustration shows the desirable face and leg covering and appearance of fleece, but the animal is not as compact in form as is usually preferred.

the eyes and ears, short, breedy looking, and varies in color from brown to almost black, the legs where not wooled showing the same color.

Aside from the head the Shropshire type calls for a very attractive smoothness and compactness of body set upon short legs. This type can be recognized whether the wool is long or short, trimmed or untrimmed, by standing some distance off and studying the outlines and appearance of the animal before endeavoring to examine points of detail.

The breeders' association for this breed is American Shropshire Registry Association, Miss Julia M. Wade, secretary, La Fayette, Ind.

## THE HAMPSHIRE.

The strong point of the Hampshire is the rapid rate of growth in the lambs when well fed. This quality is associated with unusual size, the breed being the largest of the middle wool class. Because of this feature the breed is favored by persons wishing to get lambs upon the market at an early age and who are prepared to furnish feed and care to insure this rapid growth.

The ewes rank with other middle wools in the number of lambs produced, and are fully average in milking qualities and mothering their

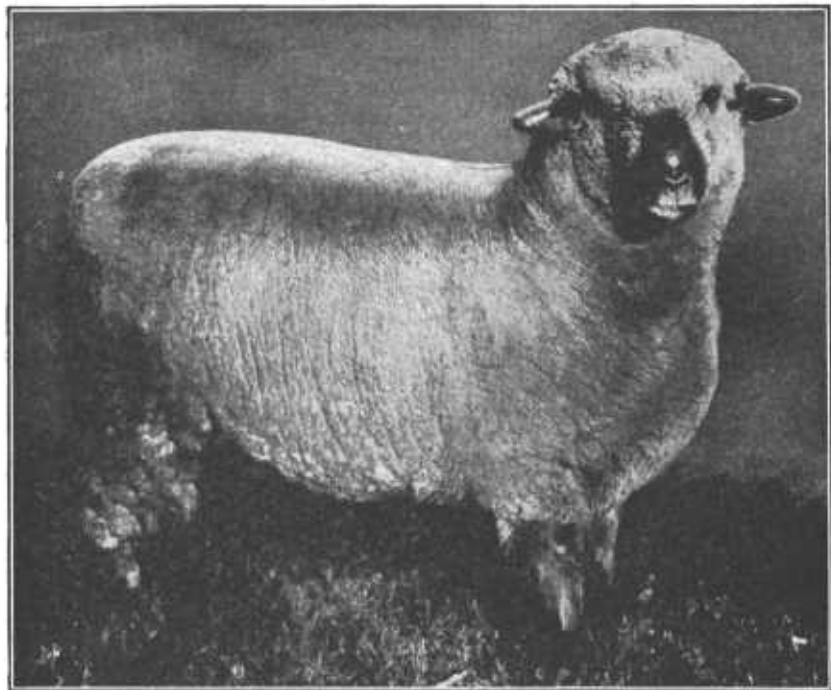


FIG. 3.—A Hampshire ewe.

The square and rugged appearance shown is peculiar to the Hampshire. The nose does not show as strong as is usual. The ears are typical.

lambs. On account of its size and weight the Hampshire is not adapted to very rough or scanty pastures.

In appearance the Hampshire is large framed, rather tall, heavy boned, rugged, and somewhat coarse looking. Apart from the size, the head is the most distinctive feature. This is large, strong in the nose in both sexes, black in color, and the ears are large and seldom erect. A fine or a small head is not associated with the qualities upon which the breed's popularity is based. The face is sometimes woolled below the eyes, though commonly only over the crown.

There is considerable variation in the length and closeness of the fleeces, the opener ones running more to length, but a fairly close and rather coarse fleece is most common and does not shrink heavily in scouring. Associated with the dark color of face and legs, the skin is usually inclined to be blue.

The breeders' association for this breed is American Hampshire Sheep Association, C. A. Tyler, secretary, 310 East Chicago Street, Coldwater, Mich.

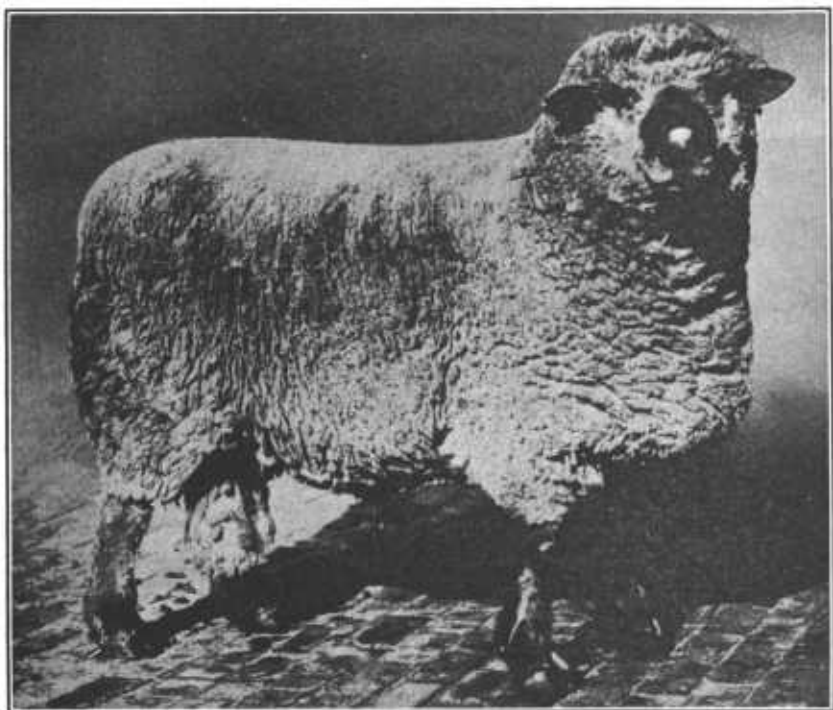


FIG. 4.—An Oxford ram.

This illustration shows the square type of the Oxford. The fleece does not appear as well as in some of the better specimens of the breed. The shape and expression of the face are typical.

#### THE OXFORD.

An idea of the Oxford may be gained from the fact that the blood of the Hampshire and Cotswold was used in forming the breed. Being a very large and heavy breed, the lambs grow rapidly when well fed, and can be matured early if desired, though not so early as those of some of the less growthy breeds. They fit in well under a plan of slower early growth and later finishing, such as is suitable with the amount and kind of feed and labor available in many sections devoted to mixed farming. The breed is an average of the down breeds in respect to yield of lambs, milking qualities, and length of life.



The fleece of the Oxford is of special importance. While usually more open than in similar breeds, yet it is close enough for protection, and the extra length adds to the weight as well as making it useful when length of fiber, without too great coarseness, is needed.

The typical Oxford is a large-framed, heavy-boned, strong-looking sheep. The appearance of size is added to by the extra length of wool, though some individuals run to the shorter, more compact style of fleece. The head is less coarse and lighter colored than that of the Hampshire. The face and leg color varies, but is usually a light brown, and there is a small white spot on the end of the nose. The face is partly covered with wool. The ears are of medium size and not usually woolled.

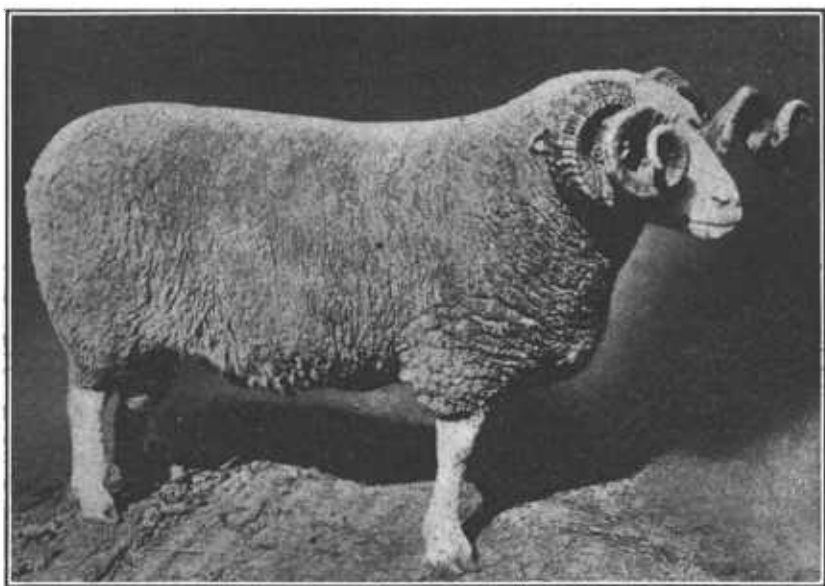


FIG. 5.—A Dorset ram.

This illustration shows a close fleece. The strength of the head and the horns are characteristic of mature rams of the breed.

The breeders' association for this breed is American Oxford Down Record Association, W. A. Shafor, secretary, Hamilton, Ohio.

#### THE DORSET HORN.

The Dorset is of the middle wool type, but is not a "down" breed. Both rams and ewes have horns. The faces and legs are white.

The type is one of a little larger and coarser frame with less compactness than is found in the smaller down breeds. Openness of shoulder is quite common. The fleece is medium in closeness and length, and coarser than the Shropshire. There is little wool on

the face and legs, and the belly is frequently short woolled or nearly bare.

The strong feature of the Dorset is the breeding habit. The breed was developed in a section where early lambs were desired and early breeding ewes were preferred. The ewes can regularly be bred to lamb in the fall. Two crops of lambs in one year are possible, though seldom advised. Twins are quite numerous and the ewes are extra milkers. Partly because of the milking qualities of their mothers the lambs grow and mature rapidly. This point, combined with the early breeding habit, makes the breed particularly popular with

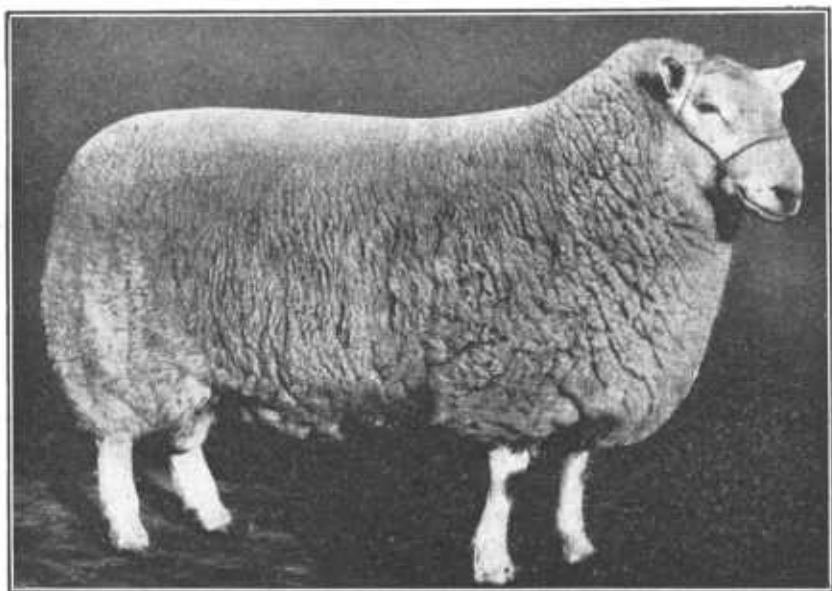


FIG. 6.—A Cheviot ram.

The general form shown in this illustration is characteristic of the Cheviot. The shape and bareness of the head is also characteristic, but the face has not the appearance of life usually shown.

farmers raising winter or "hot house" lambs for marketing from Thanksgiving to Easter.

The breeders' association for this breed is The Continental Dorset Club, J. E. Wing, secretary, Mechanicsburg, Ohio.

#### THE CHEVIOT.

The Cheviot is a mountain breed. It is accustomed to grazing over rough places and is very active and alert, both in appearance and behavior. It is vigorous and hardy, and capable of producing mutton upon lands unsuited to other breeds.

The breed is distinguished by the short and very blocky appearance, which is due in part to the length of the fairly dense fleece.

There are no brown markings, and the bare white face with the strong nose, prominent eye, and erect ear have gained the Cheviots many admirers. The conformation has been much improved, but sharp and poorly covered shoulders are common. In development of hindquarters the breed rivals the Southdown.

The breeders' association for this breed is American Cheviot Sheep Society, F. E. Dawley, secretary, Fayetteville, N. Y.

#### OTHER MIDDLE WOOLED BREEDS.

The Suffolk is a "down" breed. The ewes are hardy, very prolific, and heavy milkers. The face and legs are bare, dark black, and the belly wool is light.

The Tunis is an Asiatic sheep, hornless, brown faced, heavy eared, and the wool is white, brown, or reddish, or mixed in color. The breed also has the fat tail character. The lambs are rapid growers, and the blood is sometimes used by raisers of winter lambs.

The breeders' association for this breed is American Tunis Sheep Breeders' Association, Charles Rountree, secretary, Crawfordsville, Ind.

#### LONG WOOL BREEDS.

The long wools, bred chiefly for mutton, are the largest breeds of sheep. All of them are large-framed, square-bodied sheep, with very broad backs. Their fleeces are open or loose as compared with the fine and middle wools, coarser, and very long.

As their size indicates, the breeds of this class have been developed for level lands where feed can be obtained without much travel. With proper attention they will thrive upon lands that are too low and wet for the breeds of the middle wool class, though the keeping of any sheep on marshy ground is not to be advised. The long wools have been found to thrive in regions of excessive rainfall, the long wool carrying the water off the body as the close fleece will not do. Lambs of the long woolled breeds do not mature so rapidly nor fatten so young as those of other mutton breeds. On some farms the total weight of the lambs produced by these sheep will be greater in proportion to the land used for the flock than from the smaller breeds, but extra weight in lambs beyond 95 pounds usually lowers the price on the market. The profit from an animal is determined no less by the cost of raising than by what it sells for, and both these things must be taken into account in deciding what class of sheep to raise. The long wools are favored by only a small proportion of farmers who raise lambs for market.

## THE COTSWOLD.

The typical Cotswold is a big-bodied, rather tall sheep, of stylish appearance. The color of the face, ears, and legs is white or white mixed with a little brown. The wool extends up over the poll and hangs in ringlets of varying length over the face. All over the body the wool hangs in long wavy ringlets that do not show in the same way on other breeds. Generally the thigh wool is hairy, though the fleece as a whole is bright, and, on account of having no excess of oil, is light in shrinkage and sells well.

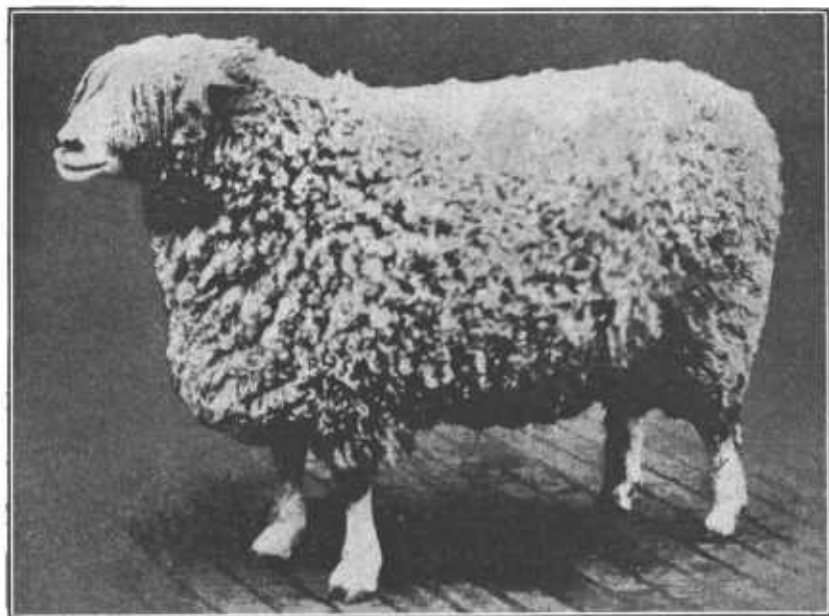


FIG. 7.—A Cotswold ram.

The shape and strength of bone are typical, as well as the appearance of the fleece and the forelock.

The breeders' association for this breed is American Cotswold Registry Association, F. W. Harding, secretary, Waukesha, Wis.

## THE LINCOLN.

The Lincoln is shorter and more compactly built than the Cotswold. The face and legs are white with occasionally a bluish tinge. The back is very strong, heavily and firmly fleshed. The wool is of great length, though much coarser than that of the shorter wooled breeds. Instead of hanging in the ringlets of the Cotswold it is in larger, broader locks, with a characteristic curl at the outer end.

The breeders' association for this breed is National Lincoln Sheep Breeders' Association, Bert Smith, secretary, Charlotte, Mich.

## THE LEICESTER.

The Leicester is very easily distinguished from the other long wools by its lean and strong face. The nose is decidedly Roman and the head is bare of wool from the ears forward. The Leicester has a very wide and well covered back, but the depth of body is less than in the other long wools. This feature, with a strong tendency to lightness of belly wool, gives the breed a leggy appearance. The wool is finer and softer than that of the Cotswold or Lincoln, though not always so thick upon the body. The fleece hangs in locks smaller than those of the Lincoln and without the Cotswold's appearance of ringlets.

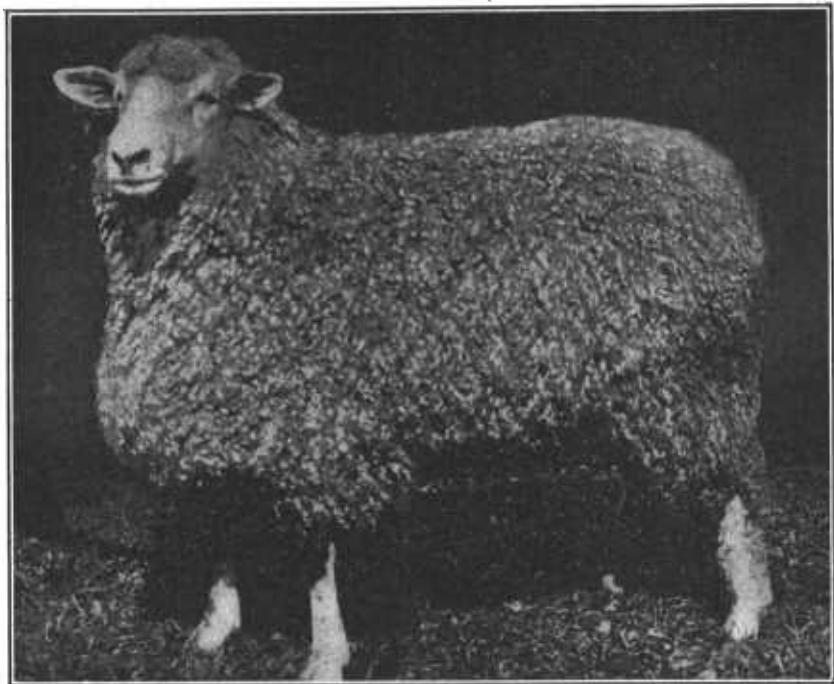


FIG. 8.—A Lincoln ewe.

The shape of the head and the amount of covering is typical.

The breeders' association for this breed is American Leicester Breeders' Association, A. J. Temple, secretary, Cameron, Ill.

## OTHER LONG WOOL BREEDS.

Other long wool breeds are the Romney Marsh, or Kent, the Wensleydale, and Devon Long Wool. There are some flocks of the first named in America. They have denser, closer fleeces than the breeds discussed, and it is claimed for them that they are more accustomed to lowlands and to scantier fare than the other long wools, though hardly equal to them in conformation.

The breeders' association for this breed is American Romney Breeders' Association, J. E. Wing, secretary-treasurer, Mechanicsburg, Ohio.

#### FINE WOOL SHEEP.

All fine wool sheep are descendants of earlier Spanish stock. The American Merinos have been bred nearly altogether for wool. Some breeders of the Delaine, or C type Merino, have bred to some extent for a mutton carcass in addition to fineness and length of wool. In the case of the Rambouillet there has been a greater effort to improve the mutton qualities.

A common characteristic of all Merinos and Rambouillets is the fineness of the wool. It is for this quality they have been bred, and while there are variations, there is as much of uniformity in fineness as in any one character of any class of sheep. This fineness is an important quality of wool, although its value in the market varies from time to time. The length of Merino wool varies, less than one-third of the fleeces being long enough for combing. Wool of the fineness of the Merino and of combing length (over 2 inches) is known as Delaine. The fleeces of fine-wool sheep are heavy in oil or yolk, sometimes losing over 70 per cent in scouring. While sometimes quoted at a seeming low price per pound on this account, it must be remembered that a fair basis of comparing fleece values is to consider the fleece weight along with its value per pound. Along with the fineness and oil of the fleeces of the fine-wool sheep there is the tendency to wrinkles and folds upon the neck and body, considered as necessary in the production of the finest wool. The extent of the development of wrinkles varies and is referred to later.

Other special features of the fine-wool sheep as a class are: The ability to stand traveling long distances for feed and water, and the instinct to herd closely. It is these qualities that have caused fine-wool sheep to be used so largely on the range. In addition to the points named, the fine wools as a class have strong resistance to internal parasites and are long lived. They are slow in maturing, the ewes produce few twins, and do not rank high as mothers and milkers. The ewes are much more likely to breed in spring and summer than are the ewes of the mutton breeds, and this has caused them to be used by winter lamb raisers for mating with mutton rams. A few of the rams are hornless, but most of them have strong curving horns. The ewes are always polled. Sheep of this class have been found to thrive under a wide variety of conditions, sometimes on rather low moist land.

#### THE AMERICAN MERINO.

The statements previously made apply equally to the A, B, and C types of Merinos. In the A and B types the body is considered only

so far as is necessary to secure the vigor and stamina needed to enable the sheep to produce a heavy fleece of fine wool. Some breeders are now giving more attention than formerly to strength of top line and heart girth. The A type is the extreme in the size and number of wrinkles as well as in the fineness of wool. On account of the wrinkles the A type is not considered desirable for commercial wool raisers.

Merinos of the B type are stronger in body than the A's, less heavily wrinkled, and grow wool that is longer but not so fine.



FIG. 9.—An A type Merino ram lamb.

The wrinkles over all parts of the body, the density of the fleece, and the covering of the face and legs are characteristic.

The C type, or Delaine Merino, is larger and less wrinkled than the other types. In rams two good-sized folds on the neck are desired, while the body is sometimes quite smooth. Length of wool is demanded in this type, together with as much of weight and fineness as can be combined with it. Some C type flocks have considerable mutton value and the lambs are fed to be marketed after their first shearing.

While Merinos are recorded as being of A, B, or C type, there is nothing to prevent mating A's and C's to produce B's. In fact, such is common practice. Because of this it is especially necessary to be assured that the parents and grandparents of the ram to be used were of the type it is desired to raise.

The breeders' associations for Merinos are American and Delaine Merino Record Association, S. M. Cleaver, secretary, Delaware,

Ohio; Dickinson Merino Sheep Record Co., Mrs. Beulah McDowell Miller, secretary, R. F. D. No. 2, New Berlin, Ohio; National Delaine Merino Sheep Breeders' Association of Washington County, J. B. Johnson, secretary, 248 West Pike Street, Canonsburg, Pa.; Standard Delaine Merino Sheep Breeders' Association, R. M. Wood, secretary, Saline, Mich.; Michigan Merino Sheep Breeders' Association, E. N. Ball, secretary, Ann Arbor, Mich.; Vermont, New York, and Ohio Merino Sheep Breeders' Association, Wesley Bishop, secretary, R. F. D. No. 1, Delaware, Ohio.

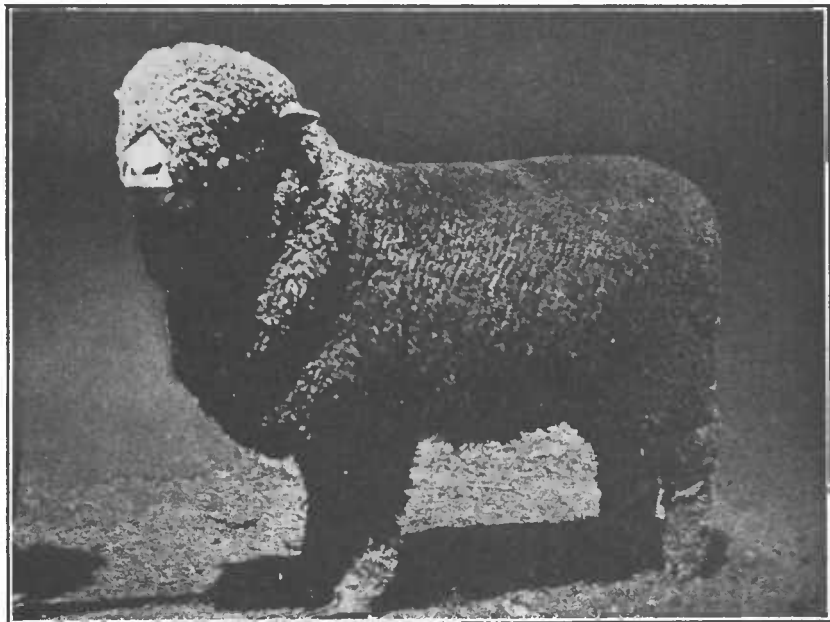


FIG. 10.—A Rambouillet ewe.

The size and squareness of form with face and leg covering are characteristic of the best Rambouillets.

#### THE RAMBOUILLET.

The Rambouillet is the largest and strongest bodied of fine-wool sheep. Many Rambouillet breeders give most attention to the fleece, though size is usually more sought for than in the American Merinos. Some of the ewes have backs broad and fleshy enough to compare favorably with the best of the mutton sheep. The rams are likely to be high in the withers and low back of the shoulders. Their size, growthiness, and strong vitality are their strongest points from a mutton standpoint. In selecting for a combination of mutton and wool, much will depend upon the course followed by the breeder of the flock from which the purchase is made.



Rambouillet fleeces vary in fineness and length, but are usually quite dense. They carry less oil than the American Merinos, but afford ample protection from storms and low temperatures of any section.

In selecting fine-wool rams it is necessary to be correctly informed in regard to the actual age of the fleece and to know whether or not the wool was shorn close to the skin over all parts of the body at the previous shearing.

The breeders' associations for this breed are American Rambouillet Sheep Breeders' Association, Dwight Lincoln, secretary, Milford Center, Ohio; International Von Homeyer Rambouillet Club, E. N. Ball, secretary, Ann Arbor, Mich.

#### CROSS-BRED SHEEP.

It is sometimes, though rarely, good policy to cross breeds of sheep. In a farm flock that is to be maintained and enlarged by keeping ewe lambs raised, sires of the same breed should be used continuously. If it appears really necessary to change breeds it will be quicker and cheaper to sell the stock on hand and start over again. The ewe of mixed breeding is a very uncertain quantity as a lamb raiser.

With flocks of fine-wool ewes it is sometimes desirable to use mutton rams to sire lambs having more mutton quality than could be had with purebred Merinos. Both ewes and ram lambs from such a cross should be marketed and a large enough number of ewes mated with good rams of the same blood to produce lambs to replace old ewes.

